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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,066	07/25/2003	James R. Downing	HDI 4.1-1	2223
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MCLEOD & MOYNE, P.C. 2190 COMMONS PARKWAY OKEMOS, MI 48864				

EXAMINER
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BRITTAIN, JAMES R

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/627,066

Applicant(s)


DOWNING ET AL.

Examiner

James R. Brittain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) 17-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,7-12 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 2,5,6 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02092004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

*Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-16, drawn to an attachment device, classified in class 24, subclass 701.
- II. Claims 17-22, drawn to a method for attaching a head and neck support device to a helmet, classified in class 29, subclass 446.
- III. Claims 23-26, drawn to a method for mounting a post attachment to a helmet, classified in class 29, subclass 525.01.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product such as providing a catch for connecting the head and neck support device and the catch having a circular opening that is resilient so as to form a snap fit with the post and is secured to the head of the post by positioning the head through the resilient opening so that it is captured by the snap fit. This alternative method is materially different from claim 17 in that the opening in the catch is circular as proposed rather than of two sections of different width as indicated in claim 17.

Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product

as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product such as molding the shell of the helmet with the hole therein for the receiving the post. This alternative method is materially different from claim 23 in that the hole in the helmet is made while molding the helmet as proposed rather than by drilling as indicated in claim 23.

Inventions II and III are materially different processes of using the product. The inventions can be shown to be distinct if (1) the method for attaching the head and neck support device to a helmet can be practiced with a materially different method of mounting a post attachment to a helmet or (2) the method of mounting a post attachment to a helmet can be practiced with a materially different method of using the post attachment. In this case, the method for attaching the head and neck support device to a helmet can be practiced with a materially different method of attaching a post to a helmet such as molding the shell of the helmet with the hole therein for the receiving the post. This alternative method is materially different from claim 23 in that the hole in the helmet is made while molding the helmet as proposed rather than by drilling as indicated in claim 23.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II nor for Group III, restriction for examination purposes as indicated is proper.

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During a telephone conversation with Ms. Mary M. Moyne on November 23, 2004 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-16. Affirmation of this election must be made by applicant in replying to this Office action. Claims 17-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### *Claim Objections*

Claim 7 is objected to because of the following informalities: The term "the flat sections" (line 2) lacks clear antecedent basis. It is assumed that this claim depends from claim 4 rather than claim 3 so as to have proper antecedent basis for the claim terminology. The claim is being examined on the basis of this assumption. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 8-10, 14 and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kintzi et al. (US 6813782) in view of England (US 988558) and Sawyer (US 3925822).

Kintzi et al. (figures 3, 4) teaches an attachment device for connecting a head and neck support device to a helmet via a strap, which comprises a readily attachable and detachable connection 50, 60, 70 to a helmet (col. 12, lines 6-42). The difference is that the connection lacks:

- (a) a base having a front surface and a back surface with an opening extending therebetween for positioning on the helmet with the back surface of the base adjacent an outer surface of the helmet and the opening of the base aligned with a hole in the helmet;
- (b) a button having an opening and positioned adjacent the front surface of the base with the opening of the button aligned with the opening of the base;
- (c) a resilient member positioned between the front surface of the base and the button for biasing the button in a direction away from the base;
- (d) a post having opposed first and second ends with a head at the first end for positioning through the openings of the button and the base and the hole in the helmet so that the second end of the post is adjacent an inner surface of the helmet;
- (e) a retainer for mounting on the second end of the post adjacent the inner surface of the helmet for securing the post in position in the hole in the helmet; and
- (f) a catch for connecting to the head and neck support device and having an opening for connecting to the head of the post by positioning the head of the post through the opening.

However, England (figures 1-4) teaches an attachment device for securing protective curtains but usable for many applications to provide a readily attachable and detachable connection (page 1, lines 9-16), which comprises:

(a) a base 24 having a front surface and a back surface with an opening extending therebetween inherently capable of being positioned on a helmet with the back surface of the base adjacent an outer surface of the helmet and the opening of the base aligned with a hole in the helmet;

(b) a button 25 having an opening and positioned adjacent the front surface of the base with the opening of the button aligned with the opening of the base;

(c) a resilient member 26 positioned between the front surface of the base and the button for biasing the button in a direction away from the base;

(d) a post 12, 13 having opposed first and second ends with a head at the first end for positioning through the openings of the button and the base and fully capable of inherently into the hole in the helmet so that the second end of the post is adjacent an inner surface of the helmet;

(e) a catch 14 for connecting to the head and neck support device and having an opening for connecting to the head of the post by positioning the head of the post through the opening; and

Sawyer (figures 1, 5) teaches that it is desirable to position a retainer 14 inside an opening in a helmet to receive a threaded shank so as to more easily and better unite the threaded shank to a substrate wherein the retainer functions to by having a size greater than the hole in the helmet and threadedly engages the threaded shank.

As it would be beneficial to modify the connection of Kintzi et al. so as to be readily attachable and detachable and to more easily mount the device upon a helmet by utilizing a threaded retainer from inside the helmet, it would have been obvious to modify the teachings of

Kintzi et al. so as to utilize the base, button, spring and catch of England and the retainer of Sawyer.

England is the key reference that discloses the fastener itself. The catch 14 has the keyhole shape 20, 21 that engages a connector section adjacent the head and wherein the connector section has a size less than the size of the head and thereby suggests the structure of claims 3 and 8-10.

Claims 4, 7, 11 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kintzi et al. (US 6813782) in view of England (US 988558) and Sawyer (US 3925822) as applied to claims 3 and 8 above, and further in view of Takada (US 3885811).

Further modification of the device of Kintzi et al. as modified by England such that the fastener of England has parallel flat sections upon the post that alternate with curved sections so as to pass through parallel edges of the hole in the catch would have been obvious in view of Takada (figures 2, 5, 6) in which the post 10' has such structure to cooperate with the edges 5 of the opening so as to require alignment for passage of the post through the sections of the opening, a beneficial safeguard.

Claim 16 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kintzi et al. (US 6813782) in view of England (US 988558) and Sawyer (US 3925822) as applied to claim 15 above, and further in view of Puckett (US 3928896).

Further modification of the device of Kintzi et al. as modified by England and Sawyer such that the retainer is similar in size to the back surface of the base would have been obvious in view of Puckett (figures 1a-1c) wherein the base 14 is sized similar to the retainer 14 for easier assembly and equal distribution of stress upon the opposite sides of the substrate.



*Allowable Subject Matter*

Claims 2, 5, 6 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

The patents of Shomber (US 2640246; figures 1-3), Ishizaka (US 3583042; figures 1, 2), Roberts, II et al. (US 6381758; figure 3) and Bassick et al. (US 6729643, figures 3, 4) teach pertinent fastener and restraint structure.

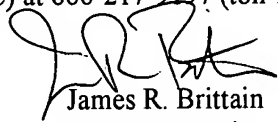
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is (703) 308-2222. The examiner can normally be reached on M-F 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
James R. Brittain  
Primary Examiner  
Art Unit 3677

JRB